

What is Claimed Is:

1. A precious metal magnetic sputtering target comprising Pt, Co, and at least 2 atomic % of at least one element selected from the group consisting of Cr, B, Ta, Nb, C, Mo, W, Zr, Zn, Cu, Hf, O, Si and N.
2. The sputtering target defined by claim 1, wherein said master alloy comprises Co and at least 2 atomic % Cr, Ta and B.
3. The sputtering target defined by claim 1, wherein said master alloy comprises Co and at least 2 atomic % Cr and B.
4. The sputtering target defined by claim 1, said alloy having multiple phases comprising CoB, CoCrB, CoCr, CoPt, CoCrPt, and Pt.
5. The sputtering target defined by claim 1, comprising CoCrPtTaB alloy.
6. The sputtering target defined by claim 1, comprising CoCrPtB alloy.
7. A method of preparing a precious metal magnetic sputtering target comprising a multiphase alloy comprising Pt and a masteralloy comprising Co and at least 2 atomic % of at least one element selected from the group consisting of Cr, B, Ta, Nb, C, Mo, W, Zr, Zn, Cu, Hf, O, Si and N, said method comprising the steps of ball milling a powder of the masteralloy with Pt powder to mechanically alloy Pt to the master alloy and densifying the resultant alloy to form the sputtering target.
8. The method of claim 7, wherein said densification pressure is from about 15,000 psi to 30,000 psi at a temperature of from about 1500° to about 1900°F for 1 to 6 hours.

Plot
price
1-6
11/6/02

1. Good example
 $P = 21755 \text{ psi}$
 $T = 1742^\circ \text{F}$
 $\text{Time} = 1 \text{ hr}$

9. The method of claim 7, wherein the masteralloy comprises Co, Cr and B.

10. The method of claim 7, wherein the master alloy comprises Co, Cr, Ta and B.

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